

**STATE WATER RESOURCES CONTROL BOARD
BOARD MEETING SESSION – DIVISION OF FINANCIAL ASSISTANCE
APRIL 5, 2006**

ITEM 5

SUBJECT

CONSIDERATION OF ALLOCATION OF \$400,000 FROM THE CLEANUP AND ABATEMENT ACCOUNT (CAA) TO THE LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD FOR EMERGENCY POND WATER TREATMENT AT LEVIATHAN MINE

DISCUSSION

Leviathan Mine is an inactive sulfur mine located in Alpine County. The State acquired the Mine in 1984 to clean up water quality problems caused by historic mining practices. Those practices resulted in the generation of acidic mine drainage (AMD). Jurisdiction over the Mine rests with the State Water Resources Control Board (State Water Board), which, in turn, has delegated jurisdiction over cleanup work to the Lahontan Regional Water Board. In 1985, the Lahontan Regional Water Board completed a pollution abatement system at the Mine, which resulted in dramatic improvements in water quality. However, that system did not address all pollution problems at the Mine, so contamination, primarily AMD, continues to discharge to Leviathan and Aspen Creeks, causing adverse effects.

In May 2000, the United States Environmental Protection Agency (USEPA) designated Leviathan Mine a federal Superfund site and the State of California the potential responsible party. The State is, therefore, required to provide funding for cleanup and remediation of the Mine under the federal Comprehensive Environmental Response, Compensation, and Liability Act. Cleanup actions are further mandated by USEPA's annual issuance of Administrative Abatement Actions until an ultimate remedy is identified for implementation. The required cleanup actions include preventing pond overflow.

During the winter, AMD is collected in a series of ponds at the Mine. The AMD is a dilute sulfuric acid solution containing high concentrations of metals and arsenic. In the summer, that AMD, along with direct precipitation that falls on the ponds, is treated and discharged to Leviathan Creek. The treated discharges meet USEPA requirements. Since the Lahontan Regional Water Board started treating AMD at the Mine in 1999, the ponds have not overflowed. As a result, aquatic life in Leviathan Creek and downstream has improved.

Last year's heavy precipitation recharged groundwater in the Mine area, and, as a result, AMD flows to the ponds are greater than in years past. This year's heavy precipitation, coupled with the increased AMD flows, will result in the ponds overflowing in late-April or early-May if no actions are taken. Untreated and uncontrolled discharge from the ponds will destroy aquatic life in Leviathan Creek and waters downstream and may render the water a hazard to human health. Such

a discharge will also violate USEPA's mandate and may result in increased liability to the State as part of the Natural Resources Damage Assessment that is underway.

The Lahontan Regional Water Board plans to contract for emergency pond water treatment to prevent pond overflow. Due the location of the site, at 7,000 feet elevation in a remote part of Alpine County, access to the site is difficult in all times except the summer and early fall. It is anticipated that equipment, treatment supplies, and personnel will need to be transported to the site over the snow using snowcats and snowmobiles.

The costs to perform the emergency treatment depend on the access conditions and the amount and character of the water being treated. The Lahontan Regional Water Board has received a contractor quote that is nearly \$400,000 assuming over-snow access and treatment of 1.6 million gallons of pond water. That volume is expected to be the maximum needed treatment to prevent pond overflow. The contractor performed a similar, but smaller, treatment late last spring that was successful at preventing pond overflow.

POLICY ISSUES

Should the State Water Board approve \$400,000 for emergency pond water treatment at Leviathan Mine?

FISCAL IMPACT

As of March 8, 2006 the uncommitted balance is \$2,713,246. Approval for funding for the Emergency Pond Water Treatment Project will not negatively impact the CAA balance.

REGIONAL WATER BOARD IMPACT

This item has the support of the Lahontan Regional Water Board.

STAFF RECOMMENDATION

The Division of Financial Assistance recommends that the State Water Board approve the Lahontan Regional Water Board request for \$400,000 from the CAA for the Emergency Pond Water Treatment Project at the Mine.

**STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 2006 -**

CONSIDERATION OF AUTHORIZATION TO ALLOCATE \$400,000 FROM THE CLEANUP AND ABATEMENT ACCOUNT (CAA) TO THE LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD (LAHONTAN REGIONAL WATER BOARD) FOR THE EMERGENCY POND WATER TREATMENT PROJECT AT LEVIATHAN MINE (MINE)

WHEREAS:

1. The Mine is an abandoned sulfur mine on property owned by the State of California;
2. Historic mining activities have caused pollution problems, primarily from acid mine drainage (AMD) generated at the site, causing adverse water quality impacts in the Mine watershed;
3. Administrative Abatement Orders issued by the United States Environmental Protection Agency require the Lahontan Regional Water Quality Board to prevent pond water containing AMD to overflow at the Mine;
4. Since 1987, the CAA has paid for various activities at the Mine to reduce or eliminate pollution;
5. Increased AMD flows and heavy precipitation will cause the ponds at the Mine to overflow in late-April or early-May if no action is taken;
6. Untreated and uncontrolled discharge from the ponds will destroy aquatic life in Leviathan Creek and waters downstream;
7. The Lahontan Regional Water Board proposes to conduct emergency pond water treatment to prevent pond overflow;
8. Emergency treatment cost estimates indicate up to \$400,000 may be needed to access the site over snow and treat enough pond water to prevent overflow; and
9. The Lahontan Regional Water Board does not have budgeted funds to conduct the needed emergency treatment.

THEREFORE BE IT RESOLVED THAT:

The State Water Resources Control Board approves \$400,000 from the CAA for the Emergency Pond Water Treatment Project at Leviathan Mine.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on April 5, 2006.

Song Her
Clerk to the Board